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# **Tennessee Wireless Communications Council**

4806 Apollo Drive, Nashville, TN 37013

January 3,2003

Confirmed

FEB 1 3 2003

Federal Communications Commission 425 12<sup>th</sup> Street, SW Washington, D.C. 20554

Distribution Center

FEB 1 0 2003
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WT Docket 02-285, RM-10077: REPLY COMMENTS

To Whom It May Concern:

The Tennessee Wireless Communications Council (TWCC), a consortium of communications technical personnel employed by Tennessee State governmental agencies, hereby files with the Federal Communications Commission (FCC) the following comments in consideration of FCC NPR 02-285.

While on the surface, the concept of this proposal appears to be workable, the TWCC believes there are several problems existing, as described below, that will prevent this action from being successful. We believe that and under frequency coordination methods proposed in the NPR for the Public Safety frequency pool, actual frequency coordination would suffer in accuracy and expediency, generating even more confusion and misunderstandings between applicants and coordinators, and between the coordinators themselves, yielding much greater frequency interference on the effected frequency bands than exists under currently also inadequate methods.

Now, because of new issues of Homeland Security, our entire country is more aware than ever of the need for increased and dependable radio communications interoperability between federal, local and state government agencies. But, it is our belief that if adopted, #02-285 would significantly hinder such efforts, possibly doing irreparable damage to the Public Safety portion of the radio spectrum. Our reasons for these conclusions are as follows:

### 1 NO COMMON DATABASE EXISTS FOR COORDINATORS

Currently, the four, primary, certified Public Safety frequency coordinators (i.e. AASHTO, APCO, FCCA and IMSA) do not share a common database. In fact, no such database exists. Opening the entire Public Safety frequency spectrum to cross-coordination frequencies by all four groups, without a common database in place, would be technically irresponsible. A common database is absolutely essential and should be required for the certified coordinators, by FCC, before NPR 02-285 or any similar rules are adopted. Without this database, the TWCC believes that even more interference in

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the spectrum would result due to more fierce, but uninformed competition, application filing time disputes, etc. At the same time, the frequency coordination process would not be improved, but become more confusing.

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## 2. LACK OF COORDINATION STANDARDS COMMON PROCEDURES

The four frequency coordinators neither apply the same standards, nor use the same terrain analysis software. Common procedures, standards, and equal terrain analysis software must be implemented.

## 3. NO PROTECTION OF STATE POLICE FREQUENCIES

With the existing lack of adequate VHF spectrum and increased demands upon law enforcement agencies caused by new Homeland Security issues, the TWCC believes that the State Police frequencies need more protection. Not all Frequency Coordinators recognize statewide systems or try to protect channels from interference. Other service coordinators assigning new frequencies 7.5 kHz or 15 kHz removed from existing statewide law enforcement system frequencies continues to be a significant interference concern. Individual statewide and regional system frequency plans are not on file with, nor shared between, all Public Safety coordinators. A common database of said plans should be established to be shared among all frequency coordinators.

### 5. DISSIMILAR SOFTWARE CAUSES CONFLICTS AND ERRORS

Common radio site coverage and signal strength contour software is not in use by all coordinators. And, even those using the same software do not use standard modeling and parameters to derive signal strength contours of proposed and existing systems. Adoption of common coverage software and standardization of parameters used therewith must be done before correct and reliable coordination can be

### 6. NEED FOR CHANNEL LOADING STANDARDS BELOW 512 MHz.

In order to make more efficient use of available spectrum below 512 MHz. in trunked systems should be governed by FCC rules specifying minimum channel loading and time periods.

# 7. NO ADJACENT CHANNEL INTERFERENCE STANDARDS FOR NARROWBAND CHANNEL SPACING

The TWCC has determined that real world narrowband adjacent channel interference occurs even when system stations are physically separated large distances. An example is a VHF high band receiver and transmitter operating on 7.5 kHz. adjacent channels must be, in practice, separated 50 miles or more in some areas in order to avoid significant interference. FCC nor the coordinators have standards in place that will result in limiting interference to acceptable levels between systems operating on adjacent narrowband channels (e.g. systems operating on frequencies